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AUTHORITY

AGO, d/a ltr, 29 Apr 1980

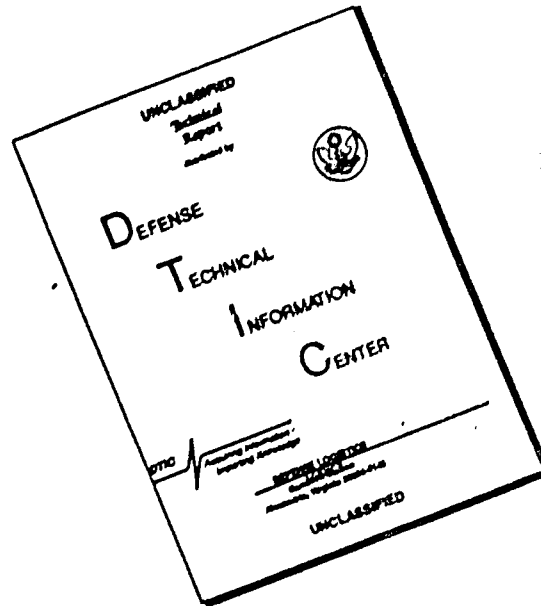
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DEPARTMENT OF THE ARMY

OFFICE OF THE ADJUTANT GENERAL

WASHINGTON, D.C. 20310

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IN REPLY REFER TO
AGAM-P (M) (21 Jun 67) FOR OT RD 670065 28 June 1967

SUBJECT: Operational Report - Lessons Learned, Headquarters, 864th Engineer Battalion (Const)

TO: SEE DISTRIBUTION

1. Forwarded as inclosure is Operational Report - Lessons Learned, Headquarters, 864th Engineer Battalion (Const) for quarterly period ending 31 January 1967. Information contained in this report should be reviewed and evaluated by CDC in accordance with paragraph 6f of AR 1-19 and by CONARC in accordance with paragraph 6c and d of AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT within 90 days of receipt of covering letter.

2. Information contained in this report is provided to the Commandants of the Service Schools to insure appropriate benefits in the future from lessons learned during current operations, and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

Kenneth G. Wickham

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 864TH ENGINEER BATTALION (CONST)
APO 96312

EGACBC-3

15 February 1967

SUBJECT: Operational Report - Lessons Learned (RCSCSFOR-65), for Quarterly
Period Ending (31 January 1967)

THRU: Commanding Officer
35th Engineer Group (Construction)
APO 96312

Commanding General
18th Engineer Brigade
APO 96377

Commanding General
United States Army Engineer Command Vietnam (PROV)
APO 96491

Commanding General
United States Army, Vietnam
ATTN: AVC-DH
APO 96307

Commander In Chief
United States Army, Pacific
ATTN: GPOP-MH
APO 96558

TO: Assistant Chief of Staff for Force Development
Department of the Army (ACSFOR DA)
Washington, D. C. 20310

Section 1. Significant Organization or Unit Activities,

1. During this reporting period weather has played a significant role. Heavy rains fell all during the first two and a half months, which slowed our construction efforts greatly. Much effort was expended in maintenance of the lines of communication on the Cam Ranh Bay Peninsula, a road network which is predominately the battalion's responsibility, and in the Army areas of Nha Trang. Also in the Nha Trang area work on the all weather road to the top of Hon Tre Island was often stopped by the heavy rains and here also much effort was directed to salvaging work already accomplished. Mud often clogged the crusher jaws, and high seas often stopped logistic support. The period also

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15 February 1967

SUBJECT: Operational Report - Lessons Learned (RCSCSFOR-65), for Quarterly Period Ending (31 January 1967)

brought some relief to our badly worn out equipment. Specifically, our HD-16 tractors were gradually replaced by the new and more versatile D-7E. However, the battalion is still critically short certain key items such as 5 ton dump trucks and compaction equipment. Our earthmoving equipment has been heavily committed but relief is in sight with Clark 290 M tractors and hydraulic scrapers expected in February or early March (The 830 M's have an average of approximately 3,000 hours of operation or about double what civilian contractors get from earthmoving equipment.) The end of the period brought fair weather and increased activity in all projects. As was the case in our last report, the major vertical efforts were centered around the Cam Ranh Bay Depot complex, the largest being the 8630 Man Cantonment Area, including the operation of an extensive prefab yard which alone used about 1,300,000 million board feet of lumber during the period. The horizontal efforts at Cam Ranh were mainly in leveling for storage hardstands and layout of the 8630 Cantonment Area: for a total of about one million cubic yards of earth moving. The major earthmoving project was at Nha Trang, on Hon Tre Island. During the period the large tasks of clearing and leveling twelve acres on top of the island and constructing four miles of road up the side were virtually completed. The battalion has continued its construction support activities of maintenance, quarry operations and asphalt and concrete production. The quarry has become the largest US Army quarry in the world. The battalion had another unspectacular but very significant role during the reporting period: equipment support to other units within the 18th Engineer Brigade. We supported the 14th Engineer Battalion (Combat) with construction equipment prior to the arrival of their organic equipment and continue to furnish water distributors, earthmoving and compaction equipment, graders and generators. We have used our attached bridge trucks on a number of convoy operations. (NOTE: The battalion has following attached units: 102nd Engr Co (CS); 39th Engr Det (Concrete Mixing and Paving); a platoon of the 553rd Engr Co (Float Brg); and the 171st and 588th Engr Dets (Well Drilling); for a total strength of approximately 1,100. Also, approximately 500 Vietnamese Nationals worked for the battalion during this period). A task force of several quarry personnel and equipment was sent for about two months to Vung Ro Bay (Port Lane) to drill and blast the material needed for the causeway to the De Long piers, for the 45th Engineer Group. We also have personnel and equipment operating in Dalat and Phan Rang, and equipment at several other locations. A few specific unit activities follow:

a. Company A has continued its maintenance support to the quarry complex, the concrete batching plant, the asphalt plant, the bridge platoon, and to our three organic construction companies. Current dispositions and operations are widely separated; due to the wide dispersion of supported activities these maintenance activities are unusually broad because of the large number and variety of different activities.

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b. Company B has continued its efforts in the Cam Ranh Bay Depot on drainage. The project is virtually complete and included ditch stabilization with gunite, asphalt, sand bags and mortar. The Cam Ranh Bay depot drainage project turned out to be very successful, in that only limited maintenance was required during the heavy rains and traffic and depot operations were never interrupted. Most of B Co's effort has been expended in the construction of an 8630 Man Cantonment Area. The scope of the project includes bringing 50 acres to grade and the construction of 19 two story BOQ's and 40 two story troop billets plus the many administrative and recreational facilities. The vertical work of the project is being accomplished by self help personnel with engineer supervision, supply and assistance. During the period, Company B virtually completed the quarry water system, which will provide water to the crusher units, and concrete and asphalt plants. This facility is of utmost importance during monsoon seasons, to prevent clogging of crusher jaws; it will also permit the release of water distributors. The scope of the project included the emplacement of 2,900 feet of 6" pipe, the construction of a 1,000 gallon water tank, the installation of two 750 GPM pumps and pump shed, plus the distribution systems to using facilities. Company B also completed three concrete pads for Soule and Butler buildings during the period, utilizing 1,800 cubic yards of ready mix concrete from the concrete batch plant. The slip form paver was tried on this job, and was successful until a hydraulic line broke. No spare was in the over pack of the paver, so we returned to the slower hand placing and finishing.

c. The major emphasis of Company C has been in the construction of the road and allied facilities for both the Air Force and Army at Hon Tre Island. During the period approximately 3,650 feet of 14,500 feet of road to the top of the island was improved and 5,400 feet of road was surfaced with rock. Additional work on the island included the completion of over 50,000 square feet of hardstand, leveling work and a prefab operation for a 600 Man Cantonment Area. On the mainland, the company completed a high type communications center building for STRATCOM. The building was constructed by joining four 20' x 50' Wayne New Jersey metal prefabs. It is fully air conditioned, panelled, has a dust proof tiled floor, and an extensive power distribution system. Additionally, Company C accomplished the major maintenance of the military road network in the Nha Trang area, and participated in several emergency bridge repair missions on route 1 in the vicinity of Nha Trang.

d. Company D has done the majority of the battalion's road building. During the period they prepared the base course for surfacing 9,600 feet of the My Ca Road, the major LOC into the Cam Ranh Bay Depot, 4,800 feet of the access road into the Replacement Center and 1,900 feet of cement stabilized roads in Cam Ranh Bay Area. They are presently near completion of an additional 42,000 square yards of hardstand for the depot. The company also made major repairs to the principal road network in the CRR depot. Also Company D

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continues to operate the most extensive prefab operation in the area. During the period they prefabricated 44 two story and 22 single story billets, besides handling the stock piling and issue of buildings to all units in the area. They have also modified and poured twenty one 20' by 120' concrete slabs for the existing cantonment area and supervised self help personnel in the construction of two story prefabs thereon. Their major completion during the period was the Automatic Data Processing Facility, a high type 2,000 square foot masonry building. The building is windowless and completely air conditioned, and has a dust proof, tiled floor, extensive electrical distribution system and plumbing.

e. The 102nd Engineer Company (Construction Support) has been continuously engaged in quarrying, crushing and asphalt paving. The quarry complex is the largest in Vietnam and its operations are massive in scope. During the period they have produced 70,000 tons of blast rock and 63,000 cubic yards of various sized aggregate despite ageing equipment. The asphalt platoon of the company has paved approximately 40,000 feet of double lane roads throughout the Cam Ranh Bay Area. The 39th Engineer Detachment (Concrete Mixing and Paving) also forms a significant part of the quarry complex. During the period they have produced 5,600 cubic yards of concrete and 6,900 cubic yards of sand cement; although the plant itself has serious shortcomings which have been reported by EIR submitted on 24 January 1967.

f. The Bridge Platoon, 553rd Engineer Company (Float Bridge) has performed continuous maintenance of the My Ca Float Bridge, the only road link from the peninsula to the mainland. Also, the unit had its trucks and drivers engaged in convoy operations almost constantly. At the end of the period the 864th Engineer Battalion and the 553rd Bridge Platoon commenced a project to make a swinging bridge of a portion of its length, in order to pass barge traffic. The battalion was engaged in training 12 half days during this reporting period. Training is conducted on Sunday mornings when mandatory subjects are presented. Supervised and programmed on-the-job training is continuous and effective. Officer and NCO classes are held twice weekly on such subjects as equipment maintenance and construction operations. During the period the 864th Engineer Battalion completed the Automatic Data Processing Facility, a high type 2,000 square foot masonry building. The building is windowless and completely air conditioned, and has a dust proof, tiled floor, extensive electrical distribution system and plumbing.

Section 2. Part II. Observation (Lessons Learned).

1. Personnel

The 102nd Engineer Company (Construction Support) has been continuously engaged in quarrying, crushing and asphalt paving. The quarry complex is the largest in Vietnam and its operations are massive in scope. During the period they have produced 70,000 tons of blast rock and 63,000 cubic yards of various sized aggregate despite ageing equipment. The asphalt platoon of the company has paved approximately 40,000 feet of double lane roads throughout the Cam Ranh Bay Area. The 39th Engineer Detachment (Concrete Mixing and Paving) also forms a significant part of the quarry complex. During the period they have produced 5,600 cubic yards of concrete and 6,900 cubic yards of sand cement; although the plant itself has serious shortcomings which have been reported by EIR submitted on 24 January 1967.

ITEM: Shortage of mess personnel to sustain a two shift operation. Young of age and inexperienced despite ageing equipment. Officers and NCOs of the platoon of the company have been reported by EIR submitted on 24 January 1967.

DISCUSSION: The present TOE for the construction company authorizes three first cooks, two cooks and one cook's helper. The number of personnel authorized is

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not adequate to sustain a two shift operation and does not allow for contingencies.

OBSERVATION: OJT personnel had to be recruited from the units resources to allow the unit mess to sustain a two shift operation. This procedure hampered the operational mission of the unit.

2. Construction Operations

Pot Hole Repair

ITEM: Techniques employed to repair asphaltic concrete road surfaces.

DISCUSSION: Several methods for repairing pot holes in asphalt pavements were tried due to the lack of good fill material as would be used for "conventional" road repairs. All methods required that the patch be cut out along vertical walls approximately 6" from the unsuitable surface and removed of all loose and excess material. The first method utilized 2"(-) quarry tailings (whose fines consist of decomposed granite, which is very sensitive to moisture content) surfaced with 1½" of cold mix asphalt, rolled with a 10 ton steel wheel roller. The second method varied only in the method of compaction of the cold mix, in that compaction with pneumatic back fill tampers was used. The third method was with sand cement (10% cement and 9% moisture), also compacted with pneumatic tampers. After initial set, this patch was tacked and allowed to cure from one to two days, and then covered with 1½" hot mix and rolled with 10 ton steel wheel roller. 1
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OBSERVATION: Within three days the cold mix patches failed, but no noticeable failure has occurred in the soil cement patches. All patches were accomplished on the MSR and were subject to the same large volume of class 60 traffic.

Culvert Headwalls

ITEM: Culvert headwalls constructed with blast rock and mortar.

DISCUSSION: The rapid erosion of dune sand and even sand bag headwalls in the Cam Ranh Bay Area led to the adoption of masonry headwalls (concrete is ideal but too slow). The procedure employed is as follows: When a culvert is installed a sand bag headwall is initially constructed to the approximate size of the intended masonry headwall. A team of five to eight Vietnamese masons then constructs a permanent headwall and/or wing wall over the sand bags with selected size blast rock and mortar. Materials required in support of the job are nominal and can be transported to a number of jobs in one truck. The job requires limited supervision and negates the need for forms, mixers and carpenters. Headwalls for culverts up to 36" in diameter can be constructed in

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one or two days utilizing about five masons.

OBSERVATIONS: The technique has worked remarkably well and is relatively economical. The finished product is neat and effective. The use of Vietnamese laborers has freed man power for other jobs. As the masons become more skilled they are used for more complicated drainage structures such as drop inlets and retaining walls. The Vietnamese concurrently learn a trade important to their community's own growth.

3. Equipment

Compaction Equipment

ITEM: The existing TOE should be modified to include a wider range of compaction equipment.

DISCUSSION: The quantity and size of earthmoving projects experienced at Cam Ranh Bay have shown the need for replacing the currently authorized (especially, but not only, the towed 7½ to 50 ton pneumatic tired roller and the 10 ton steel wheeled roller) with more contemporary equipment. The brunt of the battalion's compaction effort has been accomplished by a rented RMK 30 ton ("Tampo") self propelled roller. This roller is very fast, versatile and efficient in that it requires no turning action, produces a smooth finish and can be used for base course preparation as well as finished surfaces. It is also ideal for rolling hot mix asphalt, for it produces a much denser, longer lasting pavement. A vibratory roller (such as "Hyster's" C200 B model) is also needed in the battalion. This type of roller can be used in place of several other rollers, and is virtually essential on sandy fill or rocky surfaces. A self propelled tamping roller, such as the Rex "Pactor" or Hyster tamping compactors is also needed in place of the sheep-foot roller which is slow and difficult to maneuver.

OBSERVATION: There is a definite requirement to replace current rollers with more contemporary equipment, because current equipment is too light for today's Army traffic loadings. Rollers are so slow and unmaneuverable that they cannot keep up with road requirements.

Earthmoving Operations in Sand

ITEM: Road and ditch line cuts.

DISCUSSION: When ditches or road construction requires cuts in sand, side slopes should be constructed at a maximum of one vertical to three horizontal. Slopes steeper than this are quickly eroded and tend to cause sand to drift rapidly during high winds. When this occurs, daily maintenance is required

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to prevent road washouts. Sand ditch lines of over 1% slope should be stabilized with interceptor and diversion ditches of half culvert, soil cement grout gunite or with an asphaltic cut back (penprime, MC 1-2, MC 1-2). In congested areas where continuous traffic is prevalent, foot bridges should be constructed over ditches so that personnel do not walk on this and start erosion of treated slopes. When fills are necessary in sandy areas, adequate diversion ditches must be constructed as soon as the fill is to grade. Half culverts placed every 50 feet to 100 feet at 45° angles are appropriate. Culverts and stabilized ditches should continue over the edge of the hill, and extended to the toe of the slope.

OBSERVATION: In sand, side slopes should be no steeper than 1 on 3, and ditch lines should slope no more than 1%. This should be provided for during design if at all possible. If excessive slopes are unavoidable, stabilization and/or drainage structures must be constructed.

Water Distributors and Pumps

ITEM: Authorized equipment is not adequate.

DISCUSSION: This unit as well as other construction units in the area have not been able to satisfy all its water requirements with the authorized equipment due to the small capacity tanks and small, slow pumps. Consequently, many expedient devices such as navy cubes mounted on low bed trailers, and dollies have been necessary. One water distributor is needed to support each construction platoon on a continual basis such as for concrete and curing operations. It is also imperative that the earthmoving platoon have water for compaction purposes. The necessary expedient devices have tied up equipment designed for other purposes and valuable time is lost in moving equipment from location to location. In addition, extra GED water pumps are needed in a construction battalion, for establishing fill stands, handling construction water, and dewatering low areas. The most urgently needed size is about 250 GPM at about 50 foot head (self priming).

4. Logistics

Construction Materials

ITEM: The need exists for materials handling capabilities.

DISCUSSION: Projects often have been delayed due to inability to obtain rapid loading devices for loading, unloading, handling and stacking bulk materials. The amounts of materials handled by our battalion (average 7,000 ST per month), and the limited availability of local labor, make man handling infeasible. In order for the unit to achieve rapid loading of construction materials it has

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been imperative that we obtain a rough terrain fork lift from the materials handling motor pool. Often time none are available and the results are stock piling of released equipment in the Class IV Storage Yards and delays in getting equipment to job site.

OBSERVATION: It would be most practical for Engineer units' fork lifts to be the same basic vehicle as the engineer front loader. The Engineer Battalion needs a greater materials handling capability. Consideration might be given to an MHE augmentation to Engineer Battalion TOE for those units employed in the larger base development operations such as Cam Ranh Bay, Nha Trang, etc.

Supply of Metal Stock

ITEM: Fabrication of parts requires a more complete supply of metal stock.

DISCUSSION: Repair parts are unavailable or require considerable supply action prior to receipt. When this occurs, equipment must sit idle until the part can be obtained or fabricated. The fabrication of parts depends upon the availability of iron and brass stock, arc and gas welding rod of all types, including hard surface rod, cutting torch repair parts (seals, O-rings, cleaning wires and tips), plate and bar stock and brazing flux.

OBSERVATION: Units very frequently get equipment operational faster by parts fabrication than through supply action. A greater variety and quantity of such materials is needed in the system and on ASL's.

5. Quarry Operations

Aggregate Production for Road Bases

ITEM: Method of producing more desirable road base material.

DISCUSSION: Construction operations in sandy areas such as Cam Ranh Bay reveal that well graded crushed rock road bases have proven most desirable. Normal employment of the 75 TPH crusher removes the soil from the rock which is fine for concrete and asphalt aggregates but does not produce a material of the proper gradation for road bases.

OBSERVATION: By removing the scalping grizzly screen and modifying the chute, soil is routed to the under-crusher conveyor, and uniformly blended with crushed rock to obtain an ideal base material.

Section 2, Part II, Recommendations:

In addition to the recommendations inherent in the observations above, it is urged that an across the board review be made of the entire engineer construction equipment family. In light of this unit's experience during the last


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year and a half of operation in Vietnam, it is very apparent that there is a broad requirement for much equipment updating. Modern commercial equipment rented and borrowed from other agencies has frequently been the principal reason for getting a job done properly and on time.


RAY S. HANSEN
LTC, CE
Commanding

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EGA-3 (15 Feb 67)

1st Ind

SUBJECT: Operational Report - Lessons Learned (RCSCSFOR-65), for Quarterly Period Ending 31 January 1967

HEADQUARTERS, 35TH ENGINEER GROUP (CONSTRUCTION), APO 96312, 17 February 1967

TO: Commanding General, 18th Engineer Brigade, APO 96377

1. In accordance with Department of the Army Regulations and USARV Regulation 870-2, dated 19 July 1966, Subject: Operational Reports - Lessons Learned (RCS CSFOR-65), the subject report is forwarded for the 864th Engineer Battalion (Const).

2. The report adequately covered the major activities of the 864th Engineer Battalion (Const). The commanders observations, recommendations, and comments are generally concurred in. The following additional recommendations and comments are furnished:

a. Reference Section 2 Part 1 Paragraph 1, Mess Personnel: Mess personnel are equitably distributed throughout the 35th Engineer Group. The 864th Engineer Battalion is at full strength in MOS 94B40 (mess steward) and overstrengthened in 94B20, cooks. Current TOE's do not authorize adequate personnel for two shift operation, but should an excess of mess personnel appear in Group, they will be assigned to the 864th Engineer Battalion. Thought should be given to authorize more mess personnel to units which normally operate on a two shift basis.

b. Reference Section 2, Part 1, Paragraph 2, Item 2, Culvert Headwalls: This method of constructing headwalls is a good solution. Emphasis and supervision must be placed on the quality of mortar used. Poor mortar can cause rapid deterioration and increased maintenance.

c. Reference Section 2, Part 1, Paragraph 3, Item 2, Road and Ditch Line Cuts: Asphalt treatment (MC or peneprime) is effective only if it is compacted and placed correctly. Precautions must be taken to keep foot and vehicular traffic from breaking crusts obtained, otherwise effectiveness is ruined. Experience has shown that gunnite, mortar, or sand-cement sandbags offer optimum results.

d. Reference Section 2, Part II, Recommendations: Point is well taken that equipment updating is necessary. It should also be noted that the modern equipment rented provides a large drain on Army spending capabilities. It would be highly desirable for construction battalions to be issued commercial equipment, especially in large construction areas, such as Cam Ranh Bay. *cc*

FOR THE COMMANDER:

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William W. Yaur
WILLIAM W. YAU
Major, CE
Adjutant
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AVBC-C (15 Feb 67)

2nd Ind

Maj Komer/rsg/DBT-163

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65), for Quarterly
Period ending 31 January 1967.

Headquarters, 18th Engineer Brigade, APO US Forces 96377 11 MAR 1967

TO: Commanding General, U.S. Army Engineer Command, Vietnam, (Prov), APO
US Forces 96491

1. The report adequately covers the major activities of the 864th
Engineer Battalion (Const).

2. The observations, recommendations and Commanders comments are
concurrent with.

FOR THE COMMANDER:



THOMAS K SMITH
Major, CE
Adjutant

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AVCC-MHD (15 Feb 67) 3d Ind MAJ Fowler/wgk/BH-478
SUBJECT: Operational Report-Lessons Learned (RCS CSFOR-65), for Quarterly
Period Ending 31 January 1967

HEADQUARTERS, UNITED STATES ARMY ENGINEER COMMAND
VIETNAM (PROV), APO 96491 10 APR 1967

TO: Commanding General, United States Army, Vietnam, ATTN: AVHCG-DH,
APO 96307

1. The subject report, submitted by the 864th Engineer Battalion (Const), has been reviewed by this headquarters and is considered adequate.

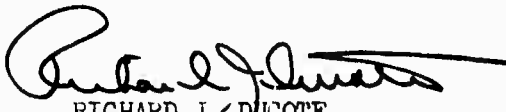
2. The recommendations and comments of the submitting and indorsing commanders have been reviewed and this headquarters concurs, subject to the following added comments:

a. Section 2, Part I, paragraph 1 and paragraph 2a, 1st Indorsement. The regular TOE authorizes enough people for a one shift, 3 meals per day operation. If "2-shift" operation means four or five meals being served, it would justify MTOE action. The unit will be informed of this.

b. Section 2, Part I, paragraph 4. Materials handling equipment and the operation of class IV storage yards is primarily a support, not a unit responsibility. Unit has been advised to submit MTOE if the need for unit MHE is justifiable.

c. Section 2, Part II and paragraph 2d, 1st Indorsement. A study will be initiated to acquire information on which to base future recommendations for changes in types and density of equipment for each type of engineer unit in Vietnam.

FOR THE COMMANDER:


RICHARD J. DUCOTE
Colonel, CF
Chief of Staff

USARV, ATTN: AVHCG-DH

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AVHGC-DH (15 Feb 67) 4th Ind
SUBJECT: Operational Report-Lessons Learned for the Period Ending
31 January 1967 (RCS CSFOR-65)

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96307
TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-OT
APO 96558 8 MAY 1967

1. This headquarters has reviewed the Operational Report-Lessons Learned for the period ending 31 January 1967 from Headquarters, 864th Engineer Battalion (Construction) as indorsed.

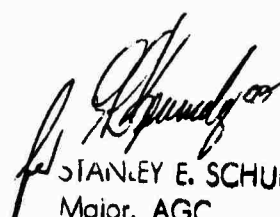
2. Pertinent comments follow:

a. Reference Items on water distributors and pumps, and construction materials, Page 7; and Paragraph 2b, 3d Indorsement: Unit should include the required equipment in an MTOE. If the requirement is urgent, the procedures outlined in USARV message (U) AVHGC-OT 19073, DTG 251132Z March 1967, subject: Changes in Equipment Authorizations, should be followed.

b. Reference Item concerning the supply of metal stock, Page 8: Authorized stockage levels are increased based on demands. Although parts fabrication may decrease equipment down time, this practice will not be required when response to requirements becomes adequate. Demands for stock and parts should be submitted concurrently.

c. Reference Part II, Section 2, Pages 8 and 9; Paragraph 2d, 1st Indorsement; and Paragraph 2c, 3d Indorsement, concerning the need for a review of engineer equipment: Concur with the unit's recommendation and the action initiated by the US Army Engineer Command Vietnam, as reported in 3d Indorsement.

FOR THE COMMANDER:


STANLEY E. SCHULTS
Major, AGC
Asst Adjutant General

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GPOP-OT (15 Feb 67) 5th Ind
SUBJECT: Operational Report - Lessons Learned for the Period Ending
31 January 1967 (RCS CSFOR-65), HQ 864th Engr Bn (Const)

HQ, US ARMY, PACIFIC, APO San Francisco 96558 3 JUN 1967

TO: Assistant Chief of Staff for Force Development, Department of the
Army, Washington, D. C. 20310

This headquarters concurs in the basic report as indorsed.

FOR THE COMMANDER IN CHIEF:


J. SNYDER
CPT, AGO
Asst AG

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when separated from protected
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